

① A ( $x_1 = 4; y_1 = -4$ )  
 B ( $x_2 = 8; y_2 = -2$ )

$$y = \underline{m}x + \underline{b}$$

WE ARE USING STAT PROGRAM

LIN REG ( $ax + b$ )

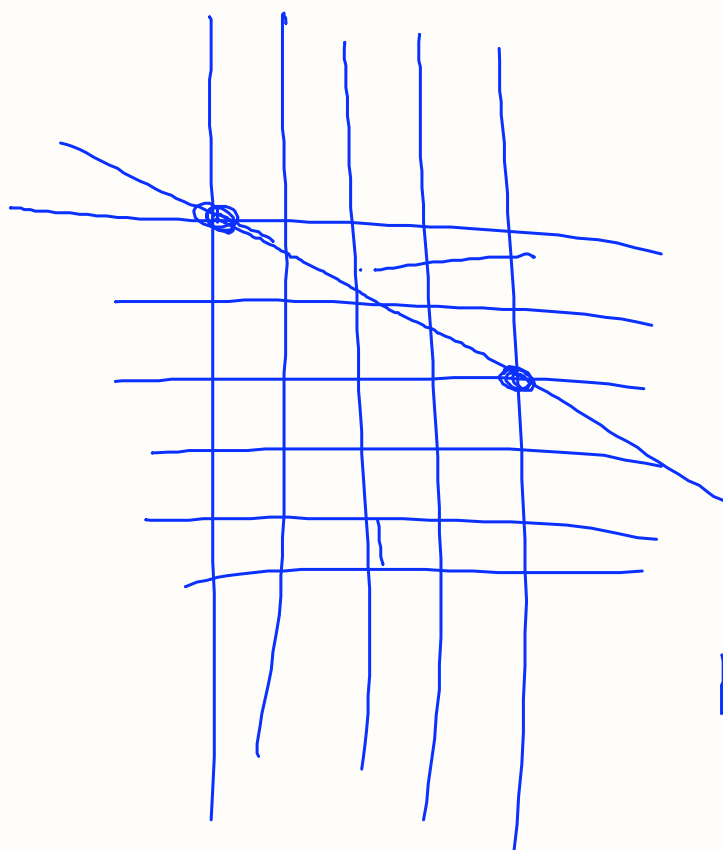
$L_1^x$	$L_2^y$
4	-4
8	-2

$$y = ax + b$$

$a = 0.5$  slope  
 $b = -6$  y-INT.

$$y = 0.5x - 6$$

(B)



$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

↑  
SLOPE

$$x_1 = -4 \quad y_1 = 1$$

$$x_2 = -5 \quad y_2 = 3$$

$$m = \frac{3 - 1}{-5 - (-4)} = \frac{2}{-5 + 4} = \frac{2}{-1} = -2$$

(c)  $K_J = -\frac{1}{3}$   
 $\uparrow$   
 SLOPE OF LINE J.

$C_m(2, 7)$   
 $x_1 = 2 \quad y_1 = 7$

$K_m = \frac{3}{1} = 3$

$y = \underline{k}x + b$

$y - y_1 = k(x - x_1)$

$y - 7 = 3(x - 2)$

$y - 7 = 3x - 6$   
 $+7 \quad +7$

$y = 3x + 1$

y-INTERCEPT = 1

MEASURING UP p.51.

$$\textcircled{1} \quad \frac{149}{96} = \frac{100\%}{x\%}$$

$$\frac{\cancel{149} \cdot x}{\cancel{149}} = \frac{96 \cdot 100}{149}$$

$$x = \frac{96 \cdot 100}{149} = 64.4\%$$

$$100\% - 64.4\% = 35.6\%$$

PERCENT OF DECREASE

②

$$\frac{16}{25} = \frac{100\%}{x\%}$$

$$\frac{\cancel{16}x}{\cancel{16}} = \frac{25 \cdot 100}{16}$$

$$x = \frac{25 \cdot 100}{16} \approx 156.3$$

$$156.3 - 100 = 56.3\%$$

PERCENT INCREASE